

BEST AVAILABLE COPYAttorney Docket No. 108298638US
Disclosure No. 01-0431**REMARKS**

In the Office Action dated 8 October 2003, the Examiner withdrew claims 1-10 and 27-49 from consideration; rejected claims 11, 13-19, 23, 25, and 26; and objected to claims 12, 20-22, and 24. The undersigned respectfully submits that the claims, as presently amended, are allowable over the applied art.

I. Restriction Requirement

In the present Office Action, the Examiner required restriction between the following groups of claims:

- I. Claims 1-10, which the Examiner characterize as being "drawn to a method of dicing a semiconductor wafer;"
- II. Claims 11-26, which the Examiner characterize as being "drawn to a method of dicing wafers and bonding the components;"
- III. Claims 27-38, which the Examiner characterize as being "drawn to a microelectronic assembly;" and
- IV. Claims 39-49, which the Examiner characterize as being "drawn to a microelectronic assembly with a mounting member."

In a telephone interview on 17 September 2003, the undersigned provisionally elected Group II, Claims 11-26, without traverse. In that interview, we did not discuss the grounds for restriction in any detail. Although the undersigned hereby confirms that provisional election, the Examiner's stated characterization of at least claims 11-26 is inaccurate. In particular, the Examiner states that claim 11 is "drawn to a method of dicing wafers and bonding the components." Claim 23 mentions dicing a wafer, but claim 11 does not refer to dicing. Similarly, claim 25 refers to attaching an adhesive pad to a microelectronic component mounted on a substrate, but claim 11 does not.

In stating the reasons for requiring restriction between claim groups I and II, the Examiner notes that claims 11-26 refer to an "adhesive pad covering less than the entire back surface" of a microelectronic component" and that claims 1-10 do not share this

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limitation. Given the mischaracterization of claims 11-26 in the claim groupings, the undersigned proposes to use this distinction as the proper line of demarcation between the two groups of claims when considering adding any additional claims. In the event the Examiner instead chooses to restate his restriction requirement between groups I and II, the undersigned has left withdrawn claims 1-10 pending.

The present amendment cancels claims 27-49, so the Examiner's reasons for requiring restriction between claim groups III and IV is moot. However, the undersigned would also like to note that the Examiner's stated basis for requiring restriction between these two groups of claims is inadequate and reserves the right to argue that point in a continuing application.

II. Amendments

Claim 24 and non-elected claims and 27-49 have been cancelled. The assignee reserves the right to pursue the subject matter of claims 27-49 in a continuing application. Claims 11, 17, 18, 20, and 26 have been amended and new claims 50-57 have been added. Many of these amendments are non-narrowing amendments. For example, the amendments to claims 17 and 18 actually broaden the scope of these claims and other claims that depend from them.

Given the cancellation of claims 27-49, the present amendment includes the same number of independent claims and fewer total claims than were included in the application as filed. Consequently, the undersigned does not believe that any fees are necessitated by this amendment. If the Office determines that any extra claims fees or any fees for any extensions of time for consideration of this amendment, such fees may be charged to Deposit Account No. 50-0665.

III. Rejections under 35 U.S.C. §§ 102 and 103

The Examiner indicated that claims 12, 20-22, and 24 would be allowable if rewritten in independent form. The present amendment incorporates limitations of claim 24 into claim 11. Accordingly, the undersigned respectfully submits that claim 11

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is allowable over the art of record. Claims 12-23 and 25 depend from claim 11 and are believed to be allowable at least by virtue of their dependence from an allowable base claim.

Claim 26 stands rejected as obvious over US Patent 6,620,649 (Uchida) in view of US Patent 6,514,795 (Jiang). Claim 26 calls for, among other steps, dicing the wafer into a plurality of second microelectronic components, then removing one of the second microelectronic components with its attached adhesive pad, leaving a remainder of the adhesive layer.

In contrast, Uchida teaches that "the portions W (insulative adhesive 7B) of the insulative adhesive 7 are simultaneously peeled from the semiconductor wafer 15 in a mass." (Column 5, lines 10-12, discussing FIG 1(f).) Only thereafter is the semiconductor wafer 15 diced along scribe lines 16 to form separate semiconductor chips. (Column 5, lines 23-30.) Uchida is consistent in this teaching throughout the various embodiments. (See, e.g., column 7, lines 54-58.)

Hence, claim 26 is readily distinguishable from Uchida. Jiang, upon which the Examiner also relies, does nothing to cure the deficiencies of Uchida. The undersigned further submits that claim 26 is unobvious over Uchida. To support a *prima facie* rejection under §103, the applied art must motivate one of ordinary skill in the art to modify the prior art in a fashion to yield the claimed invention:

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) (... Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." 916 F.2d at 682, 16 USPQ2d at 1432.).

MPEP §2143.01. There is nothing in Uchida or Jiang that would lead one of ordinary skill in the art to contradict the clear teachings of Uchida to arrive at the process of claim 26. In the absence of such a motivation, claim 26 is patentable over any

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reasonable combination of Uchida and Jiang. New claims 50-55 depend from claim 26 and are believed to be patentable at least by virtue of their dependence from an allowable base claim.

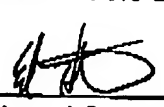
New claims 56 and 57 are also believed to patentably distinguish over any defensible combination of Uchida and Jiang. Among other features, claim 56 calls for "cutting the adhesive layer, without cutting through the wafer, to define separable, spaced-apart first and second adhesive pads." Claim 57 requires, *inter alia*, contacting the adhesive layer with a mounting member after defining first and second adhesive pads and before cutting through the wafer to a depth spaced from the mounting member. The undersigned respectfully submits that neither Uchida nor Jiang teach these features.

V. Conclusion

In view of the foregoing, the claims pending in the application comply with the requirements of 35 U.S.C. § 112 and patentably define over the applied art. A Notice of Allowance is, therefore, respectfully requested. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned at (206) 359-3848.

Respectfully submitted,
Perkins Coie LLP

Date: 8 JAN 04



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